

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-37. (canceled)

38. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgdef) comprises a message identifier (msgid) for identifying messages.

39. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgfdef) comprises a message class identifier (msgclass) for identifying a message class for any of the messages.

40. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgdef) comprises a message version identifier (msgver) for identifying a version number of the messages.

41. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgdef) comprises a message creator identifier (creatid) for identifying a creator of the messages.

42. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgdef) comprises a reference to a type of encryption (encrtype) applied.

43. (currently amended) A communication apparatus according to claim [[37]] 48, wherein said predetermined message definition table (msgdef) comprises a reference to a digital signature type (sigtype) applied.

44. (cancelled)

45. (currently amended) A communication apparatus according to claim [[44]] 48, wherein said further tables comprise a field definition table (flddef) for holding primary definitions for any field of said messages.

46. (currently amended) A communication apparatus according to claim [[44]] 48, wherein said further tables comprise a field mapping table (fldmap) comprising said mapping instructions usable by predetermined fields.

47. (cancelled)

48. (currently amended) A communication apparatus, according to claim 47, wherein comprising:

messages;

processing means (ILMS); and

a database (ILMDB), the processing means and the database arranged for point-to-point communication with another communication apparatus (SRV(m)) by means of the messages

the messages having flexible message formats (ILMF), and comprising

a header comprising message definition references (MSG ID, MSG CLASS, MSG VERSION, MSG CREATOR), a sender identifier (SENDER ID) and a destination address (DESTINATION ADDRESS); and

a message content including:

a number of fields (FIELD COUNT) and a content of any field (FIELD(1),...),

a number of objects (OBJECT COUNT) and a content of any object (OBJECT(1),...), the objects being referred to by one or more of the fields,

a number of field mappings and a content of any field mapping, any field mapping being usable by predetermined fields,

a number of actions and a content of any actions, any action being usable by the predetermined fields, wherein,

said database (ILMDB) stores a predetermined message definition table (msgdef), a field definition table (flddef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost); and

said processing means (ILMS) is arranged to interpret and process the messages while consulting said predetermined message definition table (msgdef), mapping instructions (fldmap)

and message action lists (fldact, msgpre, msgpost) stored in said database (ILMDB) using said message definition references as references to said predetermined message definitions,

said predetermined message definition table (msgdef) comprises a message system identifier (msysid) for use as a reference to further tables in said database (ILMDB),

said further tables comprise a field action table (fldact) comprising said message action lists usable by predetermined fields, and

said further tables comprise a message pre-processing table (msgpre) comprising a list of actions to be executed as pre-processing for a message either received or to be send and a message post-processing (msgpost) comprising a list of actions to be executed as post-processing for a message received.

49. (previously presented) A communication apparatus according to claim 48, wherein said field action table (fldact), said message pre-processing table (msgpre) and said message post-processing table (msgpost) comprise references to types of actions selected from the following group of actions: database type of actions and logical type of actions including mathematical calculations, assignments, logical operations and conditional operations, and commands.

50. (currently amended) A communication apparatus, according to claim 37, wherein comprising:

messages;

processing means (ILMS); and

a database (ILMDB), the processing means and the
database arranged for point-to-point communication with another
communication apparatus (SRV(m)) by means of the messages
the messages having flexible message formats (ILMF), and
comprising

a header comprising message definition references (MSG
ID, MSG CLASS, MSG VERSION, MSG CREATOR), a sender identifier
(SENDER ID) and a destination address (DESTINATION ADDRESS); and

a message content including:

a number of fields (FIELD COUNT) and a content of any
field (FIELD(1),...),

a number of objects (OBJECT COUNT) and a content of any
object (OBJECT(1),...), the objects being referred to by one or
more of the fields,

a number of field mappings and a content of any field
mapping, any field mapping being usable by predetermined fields,

a number of actions and a content of any actions, any
action being usable by the predetermined fields, wherein,

said database (ILMDB) stores a predetermined message
definition table (msgdef), a field definition table (flddef),
mapping instructions (fldmap) and message action lists (fldact,
msgpre, msgpost),

said processing means (ILMS) is arranged to interpret and process the messages while consulting said predetermined message definition table (msgdef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost) stored in said database (ILMDB) using said message definition references as references to said predetermined message definitions, and

said message definition table (msgdef) comprises an application field (appmain) for indicating whether a message received is a first message of an application and an application name field (appname) for referring to a name of said application, in order to define the application as a collection of data messages and their associated actions.

51. (previously presented) A communication apparatus according to claim 50, wherein said application is a distributed application distributed over a plurality of communication apparatuses.

52. (currently amended) A communication apparatus according to claim [[37]] 48, arranged for requesting a new message definition from a sender if a message received refers to a message definition not present in said database (ILMDB), and receiving said new message definition from said sender and storing the received new message definition in said message definition table (msgdef) in said database (ILMDB).

53. (currently amended) A communication apparatus according to claim ~~[[37]]~~ 48, arranged to interpret a previously unseen message and to create a new message definition entry in said database (ILMDB).

54. (currently amended) A communication apparatus, ~~according to claim 37, wherein~~ comprising:

messages;

processing means (ILMS); and

a database (ILMDB), the processing means and the database arranged for point-to-point communication with another communication apparatus (SRV(m)) by means of the messages

the messages having flexible message formats (ILMF), and comprising

a header comprising message definition references (MSG ID, MSG CLASS, MSG VERSION, MSG CREATOR), a sender identifier (SENDER ID) and a destination address (DESTINATION ADDRESS); and

a message content including:

a number of fields (FIELD COUNT) and a content of any field (FIELD(1),...),

a number of objects (OBJECT COUNT) and a content of any object (OBJECT(1),...), the objects being referred to by one or more of the fields,

a number of field mappings and a content of any field mapping, any field mapping being usable by predetermined fields,

a number of actions and a content of any actions, any action being usable by the predetermined fields, wherein,

said database (ILMDB) stores a predetermined message definition table (msgdef), a field definition table (flddef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost),

said processing means (ILMS) is arranged to interpret and process the messages while consulting said predetermined message definition table (msgdef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost) stored in said database (ILMDB) using said message definition references as references to said predetermined message definitions, and

said processing means (ILMS) are arranged to either merge a message received with a designated HTML file or if the designated HTML file is not found by the processing means (ILMS), to create a default dynamic HTML file.

55. (currently amended) A system comprising a communication apparatus (SRV(m)) ~~according to claim 37~~ and a terminal (ILMC) connected to said communication apparatus, said terminal comprising a terminal processor (1), a display unit (6) and input means (12, 13) for inputting data by a user, said communication apparatus being arranged for passing a message received to said terminal if said terminal is indicated in the message to be the destination address, and said terminal

processor (1) is arranged to either merge the message with a designated HTML file or if the designated HTML file is not found by the terminal processor (1), to create a default dynamic HTML, said communication apparatus comprising:

messages;

processing means (ILMS); and

a database (ILMDB), the processing means and the database arranged for point-to-point communication with another communication apparatus (SRV(m)) by means of the messages

the messages having flexible message formats (ILMF), and comprising

a header comprising message definition references (MSG ID, MSG CLASS, MSG VERSION, MSG CREATOR), a sender identifier (SENDER ID) and a destination address (DESTINATION ADDRESS); and

a message content including:

a number of fields (FIELD COUNT) and a content of any field (FIELD(1),...),

a number of objects (OBJECT COUNT) and a content of any object (OBJECT(1),...), the objects being referred to by one or more of the fields,

a number of field mappings and a content of any field mapping, any field mapping being usable by predetermined fields,

a number of actions and a content of any actions, any action being usable by the predetermined fields, wherein,

said database (ILMDB) stores a predetermined message definition table (msgdef), a field definition table (flddef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost); and

said processing means (ILMS) is arranged to interpret and process the messages while consulting said predetermined message definition table (msgdef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost) stored in said database (ILMDB) using said message definition references as references to said predetermined message definitions.

56. (currently amended) ~~A method of point-to-point communication between a sender (SRV(m)) and a receiver (SRV(m)), comprising the steps of:~~

~~a) sending messages with flexible message formats (ILMF), the messages each comprising~~

~~a header comprising message definition references including a message identifier to identify the message (MSG ID), a message class designation (MSG CLASS), a message version identifier (MSG VERSION), a message creator identifier (MSG CREATOR), a sender identifier (SENDER ID) and a destination address (DESTINATION ADDRESS); and~~

~~a message content portion, the message content portion supporting at least four sub-portions,~~

~~the sub-portions being a message data fields portion, an object fields portion, a map fields portion, and an action fields portion,~~

~~the message data fields portion comprising i) a field count field indicating a number of message data fields in the message fields portion, and ii) plural fields of message data content, each of the fields of message data content comprising a field data description portion and a data portion,~~

~~the object fields portion comprising i) an object count field indicating a number of object fields in the objects fields portion, and ii) object data fields,~~

~~the map fields portion comprising i) a field mapping a mapping count field indicating a number of map data fields in the map fields portion, and ii) mapping data fields, and~~

~~the action fields portion comprising i) an actions count field indicating a number of action fields included in the action fields portion, and ii) action data fields, the action data fields supporting commands for each of database actions, mathematical calculations, assignments, logical operations, and conditional operations; and~~

~~b) interpreting and processing said messages using a database (ILMDB) storing a message definition table (msgdef), a field definition table (flddef), mapping instructions (fldmap) and message action lists (fldact, msgpre, msgpost), wherein,~~

~~the sender identifier and the destination address are each email addresses in the form of a user name and a domain name~~
communication apparatus according to claim 50, arranged for requesting a new message definition from a sender if a message received refers to a message definition not present in said database (ILMDB), and receiving said new message definition from said sender and storing the received new message definition in said message definition table (msgdef) in said database (ILMDB).

57. (currently amended) ~~Method~~ A communication apparatus according to claim [[30]] 50, wherein said message class may be any of mail, business message, orders and shipping arranged to interpret a previously unseen message and to create a new message definition entry in said database (ILMDB).

58. (previously presented) A communication apparatus according to claim 39, wherein said message may be any of mail, business message, and orders for shipping.

59. (previously presented) A communication apparatus according to claim 46, wherein said predetermined fields may be any of mappings to hyper text markup language fields, database fields, flat file fields and other message fields.

60-61. (cancelled)